Plum Creek Timber Company White Paper

Livestock Grazing on Plum Creek Timber Company Land in the Native Fish Habitat Conservation Planning Area

Overview

Since the turn of the century, livestock grazing has been a traditional use of much of Plum Creek's land in the Native Fish Habitat Conservation Plan (NFHCP) Project Area. Improper livestock grazing can affect fish habitat and water quality. The purpose of this white paper is to discuss the following grazing issues:

- History of grazing in Project Area
- Current status of grazing on Plum Creek lands
- Present condition of riparian areas in grazing allotments
- Plum Creek's Grazing Best Management Practices (BMPs)

Key Points

The following key points are explained in this white paper:

- Livestock grazing occurs on about 45 percent of Plum Creek land in the NFHCP Project Area
- Until recently, grazing has not been managed to address water quality.
- In 1994, Plum Creek adopted a set of Grazing BMPs for Montana and Idaho.
- Although riparian conditions seem to be improving, little data exist to support that contention. Additional research and monitoring should be undertaken to verify trends.

Supporting Technical Information

Grazing presents unique environmental management and protection challenges when compared to forestry.

- Grazing is historically an annual occurrence, while timber harvest is periodic.
- Cattle graze to the stream edge unless the area is fenced or limited to cows because of topography, while timber harvest activities are controlled through use of protective buffers.

In 1991, Plum Creek adopted a set of Environmental Principles to govern resource management activities. One of these principles directs Plum Creek to employ BMPs on their lands for water quality and aquatic resource protection. Also in the early 1990s, the Montana Streamside Management Zone Act and Regulations mandated stream buffers for timber harvest, but not for cattle grazing. Plum Creek felt that grazing caused water quality impacts, and adopted their own set of Grazing BMPs in 1995 to address water quality concerns.

Current Status of Grazing

Plum Creek has 764,560 acres classified as available for livestock grazing (98 percent of which is in Montana). Of the available grazing area, 588,779 acres (77 percent) are currently leased to 106 leaseholders. The remaining 175,781 acres (23 percent) are currently vacant.

To better understand impacts to bull trout from management actions, Plum Creek scientists define two types of watershed. Tier I watersheds contain bull trout spawning and rearing streams, while Tier II watersheds contain migration and foraging streams. Twenty-eight out of 82 Tier I watersheds (34 percent) contain some amount of land suitable for grazing. Tier II basins with large amounts of land presently leased for grazing include the Blackfoot River, Middle Clark Fork, Middle Kootenai, and Upper Clark Fork River. These four basins contain 91 percent of the currently leased grazing lands. During summer 1998, approximately 5,375 cow-calf pairs grazed Plum Creek lands.

Active grazing leases include 21.3 miles of Tier I watersheds, 12 miles of Tier II watersheds, and 19.7 miles of key migratory rivers.

Present Condition of Riparian Areas

Based on existing Plum Creek information, between 25 percent and 50 percent of riparian areas in allotments exhibit water quality and riparian impacts from livestock grazing.

The Montana Bull Trout Restoration Team prepared a series of reports that describe the status of bull trout for 11 basins in western Montana. The team identified grazing as a high risk to bull trout in the Upper Clark Fork, Bitterroot, and Blackfoot River drainages. Grazing was identified as a locally significant threat in the Thompson, Stillwater, and Fisher River watersheds. The Washington Department of Fish and Wildlife has also identified grazing as a high risk to bull trout in the Ahtanum Creek watershed.

Plum Creek's Grazing BMPs

Plum Creek's Grazing BMPs have three major components:

1. A set of minimum environmental performance standards for Plum Creek property.
2. A requirement for each leaseholder to prepare an annual range management plan for the grazing season that describes how cattle will be managed to achieve the performance standards above.
3. A monitoring and adaptive management program. Monitoring involves a form and photographs. Adaptive management is an "end of year report" that describes what environmental strategies worked well during the grazing season and what did not.

The Grazing BMPs are consistent with the Prescribed Grazing BMP framework developed by the Montana Grazing Practices Work Group.

Conclusion and Implications

Based on discussions with foresters, lessees, and leaseholder BMP monitoring, riparian conditions have been put on a positive trajectory since the BMP program was initiated in 1994. However, few scientific data are available to support these observations and opinions. To obtain hard data on the effectiveness of Plum Creek's Grazing BMPs, the NFHCP adaptive management strategy could include establishment of a network of long-term riparian monitoring plots where conditions could be periodically inventoried.